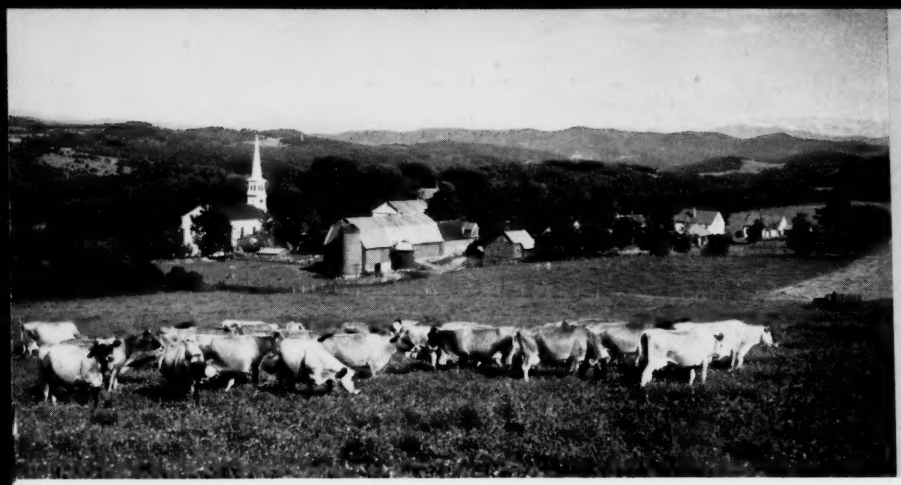

Monthly Review

Federal Reserve Bank of Boston

September 1954

New England Dairy Farm

DIVERTED ACRES

American farmers, during the past decade of wars and generally favorable weather, have increased production efficiencies to such a degree that in 1954 the Secretary of Agriculture asked that 30 million acres be diverted from wheat, cotton, and corn, into other crops, excluding peanuts, potatoes, or vegetables. Although relatively few New England crops come under government control programs, the indirect effects of these programs are substantial and of importance to all New Englanders.

The tremendous surpluses of agricultural commodities now in storage present a troublesome disposal problem, but the nation's capacity to produce more than adequate supplies of food and fiber with a continually declining proportion of its population is one of the basic strengths of the free world.

Secretary of Agriculture Benson asked this year that farmers divert 30 million acres of the nation's cropland from the production of wheat, cotton, and corn. This is an area equivalent to the land area of Maine, Ver mont, Rhode Island, and Connecticut. While such controls apply directly to only a few New England crops, indirectly they affect the cost of many of the region's farm products.

Farm output increases faster than growth in population

During the past 35 years the nation's population increased from 105 million to 162 million. Despite this larger domestic market, the nation's farmers are now producing more of many agricultural products than the nation can currently consume.

This problem of overproduction in relation to consumption has been recurrent. It has been a familiar aftermath of every war that the nation has fought. Production expanded to meet war needs and later proved to be excessive for postwar demands. As an illustration, between 1914 and 1918 the nation's farmers increased wheat acreage ten per cent to fill the war and immediate postwar needs. In 1919, the year after the signing of the Armistice, farmers harvested 73.7 million acres of wheat. Four years later, because of low prices, farmers had shifted 12.3 million acres out of wheat production. During that same four-year period the farm value of the crop dropped from $2,059 million to $818 million. Severe declines in the value of other crops and of livestock products also resulted as surpluses occurred, and marginal land was withdrawn from production.

Between 1920 and 1954, the number of horses and mules on farms declined 80 per cent, releasing an estimated 100 million acres of land once used to produce feed. In addition, the extensive agricultural research and educational programs of the past generation have resulted in new crop varieties, disease and pest controls, increased use of fertilizer and machinery, and livestock production efficiencies. Weather has been favorable. There have been no nation-wide droughts since the mid-thirties. All of these factors contributed to a 37 per cent increase in agricultural production between the two periods 1935-39 and 1949-53. A huge surplus of commodities has resulted.

Consumption patterns change

Another aspect of this problem is the change in the nation's eating habits. On the average, consumers are eating about 220 pounds more of green vegetables, fruit, meat, eggs and dairy products and about 220 pounds less of potatoes and grain products than they did in 1909. Although consumers have demonstrated their preference and willingness to pay for more animal products, the government in its support program has outbid the livestock and poultry producers with the result that

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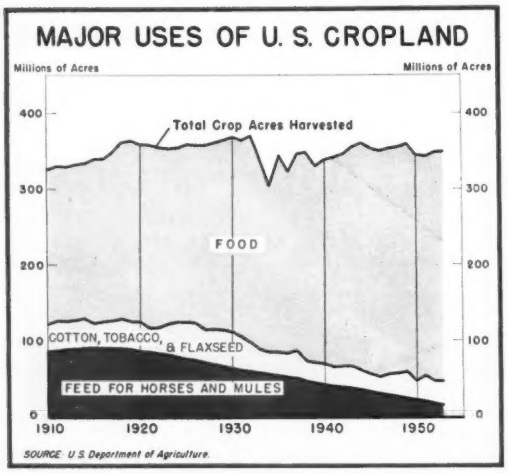

grain is not being converted into these products in as large a volume as it might be.

Also, in the past 30 years, synthetic fibers have made spectacular inroads on natural fiber markets. Between 1920 and 1950, United States Department of Commerce data show that total fiber consumption by mills producing textile products more than doubled. Consumption of cotton increased from 2.8 billion pounds to 4.7 billion pounds. Cotton is still the predominant fiber, but its relative importance dropped from 90 per cent of the 1920 total to 70 per cent of the 1950 total. The proportion of wool fibers consumed also dropped.

In contrast, rayon fibers accounted for less than one-half of one per cent of total fiber consumption in 1920, but accounted for 20 per cent in 1950. The use of newer synthetic fibers such as nylon and orlon has increased since World War II, and in 1951 over three per cent of the nation's fiber consumption was of these newer fibers. Although more natural fibers are used now than 30 years ago, the increased use of synthetics has made the increase smaller than it otherwise would have been.

Immediately following World War II, agricultural exports took the production of 52 million acres of cropland. In 1953, agricultural exports required the production from only 30 million acres, a decline equal to two-thirds of the acreage being diverted this year. This decrease results because the importing countries have achieved greater domestic production or turned to other sources of agricultural imports to conserve dollar balances.

Government supports farm prices by purchase and loans

Price-support operations carried on by the United States Department of Agriculture through the Commodity Credit Corporation seek to establish minimum prices for specified agricultural commodities. These levels of support were established in the Agricultural Act of 1949 and are basically a carry-over of legislation enacted during World War II to insure an adequate supply of food and fiber during and immediately following the war. Wheat, cotton, corn, rice, peanuts, and tobacco, the so-called basic commodities, receive a mandatory 90 per cent of parity support price provided producers comply with acreage allotments and marketing quotas, if such regulations are announced by the Secretary of Agriculture. In addition to the six basic commodities, the Secretary of Agriculture is required to support mohair, honey, tung nuts, and wool between 60 and 90 per cent of parity, and milk and butter-fat between 75 and 90 per cent of parity. Support for a variety of other commodities at 0 to 90 per cent of parity is also permissive at the discretion of the Secretary.

By direct purchases of commodities and by the use of nonrecourse loans, the government supports the prices of designated agricultural products at levels established in the Agricultural Act of 1949. According to the most recently available data, cost value of government inventories as of May 31, 1954, was $6.1 billion, a record high to date and almost double what it was in May 1953. Although the six basic commodities account for only 23 per cent of the cash receipts farmers get from marketing their products, 81 per cent of the six billion dollars invested is pledged for loans or is in inventories of these basic commodities.

Diverted acres produce new surpluses

As surpluses of grain and cotton accumulated, the Secretary of Agriculture ordered the reduction of acreage of various crops for 1953. When a farmer's acreage was cut, he tended to plant those "displaced" acres to other crops in order to maintain income and an efficient-sized unit. Thus land that once produced wheat, corn, or cotton was diverted to production of such crops as soybeans, oats, barley, dry beans, potatoes, and grass.

The vast quantities of commodities purchased by the government under the price support program require large storage facilities. These cost the government about $500,000 per day storage charges now, and government officials indicate it may be close to one million dollars per day by June 1955.

Program conflicts with international trade

In the *Staff Paper on Agriculture Presented to the Randall Commission*, the author states that: "Conflicts between agricultural programs and our international aims lie not with the objectives, but with the means used to achieve them. . . . Once a specific set of prices has been established as a goal, domestic programs come into sharp conflicts with international aims whenever world prices fall below those in domestic markets." When this situation occurs and agricultural surpluses begin to accumulate, it becomes necessary to erect tariff walls to keep the cost of the price-support program from becoming too excessive. This makes it still more difficult for other countries to earn the dollars they must if they are to purchase goods from us.

It is impossible to measure the cost of the price sup-

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port program in dollars and cents. Losses incurred by the Commodity Credit Corporation, storage and handling charges and cost of sales can be determined, but the cost to consumers in terms of higher grocery bills and the added cost to certain farmers in terms of higher grain bills are impossible to estimate.

Price supports have stabilizing effect

Price supports have been a built-in stabilizer during the postwar period. Without price supports, retail food prices would probably have been lower, but, in turn, farm income would have dropped even more than it did. Had this happened, farm purchases would have been smaller, and this loss of purchasing power would have been reflected throughout the economy.

Although their price per unit was maintained, farmers have been required to cut back acreage, thus reducing both gross and net incomes. The United States Chamber of Commerce cited the following example of how a wheat producer's income is affected by acreage curtailments. Assume that a wheat farmer, raising 600 acres of wheat in 1953, harvested 10,000 bushels. At 90 per cent of parity his gross was $22,300. For 1954 his quota is reduced to about 7,900 bushels. Again, at 90 per cent of parity, the gross would be about $17,600. For 1955 he would have a quota of 7,000 bushels for a gross of $15,600. Gross income figures in this example are based on rigid 90 per cent of parity support prices, not flexible supports. Thus, even with rigid supports, the gross income of this particular farmer would drop 30 per cent between 1953 and 1955, assuming that the land diverted from the production of wheat by acreage controls is not planted with some alternative cash crop. If the diverted acres are used to grow other cash crops, the surplus of wheat may be exchanged for surpluses in other crops.

Diversion of acreage reduces farm efficiency

A reduction in gross income is not the only effect caused by the diversion of acreage out of normal production patterns. Farmers strive to operate their farms as efficient units. With the severe restrictions that have become a necessary part of the price-support program to keep costs from becoming too prohibitive, productive acres on many farms have been diverted. The diversion of this acreage frequently has made less efficient-sized units.

In an effort to maintain an efficient-sized unit as well as income, farmers exchanged reductions in one crop for increases in another. For example, the July 1, 1954, crop report of the Agricultural Marketing Service indicated farmers reduced wheat acreage by 10 per cent and cotton planting by 11 per cent, while for corn no change was indicated. But the crop report also indicated the following increases: oats, 7 per cent; rice, 12 per cent; soybeans, 17 per cent; dry edible beans, 13 per cent; flaxseed, 26 per cent; sugar beets, 18 per cent; barley, 51 per cent; and grain sorghums, 49 per cent.

One uneconomic effect that acreage allotments and marketing quotas have on the agricultural economy is the interference with normal shifts in production from one area to another. As a result, marginal land and high-cost operators are kept in production, while some of the nation's best land is diverted to crops for which it is less well adapted.

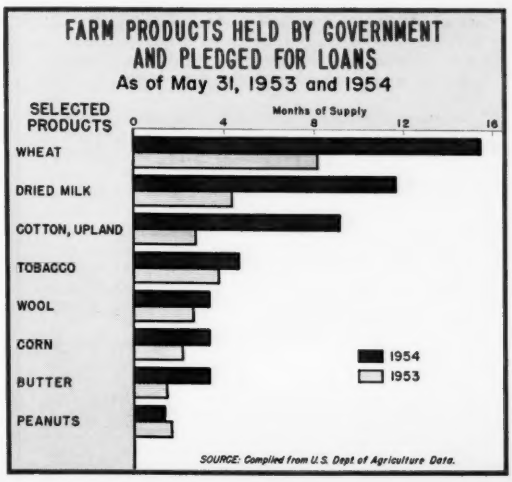
With the increased need for agricultural products caused by World War II and with guaranteed minimum prices for many commodities, farmers were encouraged to increase acreages of many of the basic and nonbasic crops. This brought many acres into cultivation that have relatively high production costs. When acreage cuts are determined, farmers in all regions, whether or not they are following conservation practices and whether or not they are on good land or on poor land, must reduce their acreages. This keeps the marginal areas in production at the expense of the lower-cost areas. Two examples: Between 1946 and 1950 acreage allotments for potatoes were reduced 41 per cent in Aroostook County, Maine, compared to 33 per cent for the nation as a whole. During the same five-year period Aroostook County's yield per acre was 420 bushels compared to 250 for the United States. The current support price for wheat is $2.20 per bushel. Yet Washington State College estimates that in 1953 it costs only $1.33 per bushel to grow and harvest a 28 bushel-per-acre crop in the Palouse area of Washington. The average yield per acre in Washington is 25 bushels.

On June 21, 1954, Secretary of Agriculture Benson announced yet more severe acreage controls in an effort to reduce production. Wheat allotments for 1955 have been reduced to 55 million acres from 62 million in 1954 and from 78 million in 1953. Acreage allotments for the other basic and for the nonbasic crops will not be announced by the Secretary until early next year.

Effects on New England are largely indirect

What effect do diverted acres have on New England, a region which imports most of its foodstuffs? In Aroostook County, Maine, where grains are used widely in rotation with potatoes, a guaranteed minimum price on oats has been very beneficial to farmers, especially during the past two years of ruinous potato prices. In the Connecticut Valley, tobacco growers receive a guaranteed price at 90 per cent of parity for their crop.

Perhaps the most obvious adverse effect is the maintenance of high food costs. The grains used in the estimated 2.4 million tons of feed which New England farmers use annually would be cheaper if their prices



were not supported. The present price-support program directly affects the costs of New England dairymen and poultrymen because the price of grain, their largest single cost item, is supported. However, poultrymen, with the exception of turkey growers, currently sell their products on an unsupported market.

Dairy products are supported currently at 75 per cent of parity and government purchases of butter, cheese and dried milk solids do raise the price of New England milk used in manufacturing. A large proportion of the milk produced in New England for fluid milk markets is sold under federal marketing orders which establish minimum prices. These minimum prices are established through use of formulas based on current costs, current consumer incomes, and current general price levels, and not upon unrealistic parity prices.

Another fundamental difference between federal milk order programs and other types of price support programs is that the cost of establishing minimum fluid milk prices is not paid for with government funds. The only exception is the salaries of the employees in the Washington office who are on the payroll of the United States Department of Agriculture. All local administration costs are defrayed through an assessment against all milk produced in the milk shed covered by the order.

Under Secretary Benson's latest acreage restriction announcement, much of the 30 million acres diverted from the production of corn, cotton, and wheat will probably be put into the production of grass. In areas where water supplies are adequate, livestock numbers will probably increase. An expansion of dairy animal numbers would be logical for those who can find markets. While New England cities will not receive any of this milk in fluid form, it is possible that New England dairymen would get a lower blended price for their milk due to the diffused effect of an increased national supply.

WHAT IS PARITY?

Parity is the term given to the prices farmers must receive for the things they sell to give them the same purchasing power that they had during the 1910-14 base period. A parity price for each commodity is determined monthly through the use of a formula which is based on the cost of 176 items and services used in farm production and farm living. When those costs go up or down, the parity prices of those commodities follow. Parity prices are the basic prices used in setting price support levels for certain farm products.

As farmers adopted more efficient production methods and mechanization, the 1910-14 base became outmoded, and the Agricultural Act of 1949 provided for modernizing parity formulas. The modernized formula tends to reduce the parity price of field crops where mechanization has made production economies possible and raise the parity prices of livestock products, fruits and vegetables where such economies were less extensive. To bring the base more nearly up to date and to reflect the changes in production methods, the modernized formula uses the average price of the most recent 10-year period and includes wages paid for hired labor.

Congress stipulated in the 1949 Act that either the old or modernized formula for determining parity could be used for a four-year period, "whichever is the higher." The Agricultural Act of 1954 provides for gradual introduction of the modernized parity for all products, starting January 1, 1956.

If beef numbers increase, New England dairymen may also expect lower prices for their cull cows, and New England broiler growers may receive lower prices due to increased competition from red meat.

Solution to problem of surplus is complex

The answer to the nation's agricultural production and surplus problem is infinitely complex; the solution will be slow in becoming apparent. Current agricultural problems result from 20 years of favorable weather, of advancing technology, and of crises which started with a depression and have included a World War and a strife-filled postwar period. During these 20 years, much farm legislation has been enacted in an effort to give the American farmer security.

Price guarantees to the farmer are firmly entrenched politically and at a sound level are desirable as a means of preventing price debacles that affect the whole economy. Present surpluses, however, clearly demonstrate the undesirability of price supports which are at so high a level as to interfere with acreage adjustments and natural shifts in production.

Flexible support levels should help

When the Congress passed the Agricultural Act of 1954 in August, a significant change in direction in farm legislation occurred. The new law which becomes effective on January 1, 1955, contains the principle of flexible support levels for the basic commodities instead of a rigid support level. The law provides for a lower level of supports as supplies increase or an increased level of supports if supplies decrease. It is the hope of most farm leaders that these flexible supports will help bring production in line with consumption.

Until flexible supports have had a fair trial, it would be unwise to conclude how effective they will be. History suggests that adoption of new techniques has generally induced increased production faster than controls have reduced production. Undoubtedly controls, if rigid enough, can accomplish the task. But the unanswered question is whether farmers will accept the severe restrictions that may be necessary to bring production into line with consumption.

While the new farm law is a step in the right direction, it does not hold all the answers to our current farm problem. But this reversal of direction in farm policy is significant. The inclusion of flexible supports in the Agricultural Act of 1954 gives the nation's farm and Congressional leaders a stronger position from which to deal with the problems of a six and one-half billion dollar government inventory of farm commodities and 30 million diverted acres.

These problems result from the decades of depression and war, and any solution will be slow in coming. As we search for uses for the accumulated supplies and diverted acres, they should not be thought of as liabilities. At present they are troublesome, but, nevertheless, the production capacity that brought these surpluses into being is a part of the basic strength of this country and of her allies. In any struggle, whether it is a cold or a shooting war, adequate supplies of food and fiber are essential. The fact that American agriculture has the capacity to produce such supplies weighs heavily in favor of the free world.

Monthly Review
FEDERAL RESERVE BANK OF BOSTON

HEAVY ENGINEERING CONSTRUCTION

A Solid Support for New England Business?

Heavy engineering construction is providing a strong support for the New England construction industry. Currently, and for the past seven years, the expanded construction programs of governmental agencies have been of major importance. Industrial construction continues to show less activity in the region than in the nation.

The existence of a six-year backlog of heavy engineering construction projects in the planning stage and the accelerated rate of public contracting during 1954 indicate a continuation of high levels of construction activity.

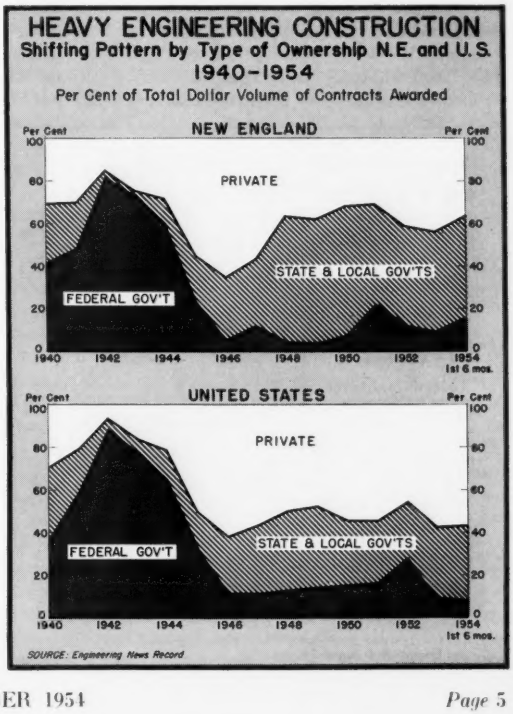
SPENDING for construction has provided a strong support for New England business since the end of World War II. New England manufacturers of construction materials have experienced a strong market for their products and construction workers have been in great demand. In both the region and the nation, the value of construction outlays in 1953 reached an all-time peak. During 1954 construction outlays have continued to rise to new levels, but the source of that spending has been changing. Also the character of construction outlays in New England has differed markedly from the national pattern. Will construction continue to be a solid support for New England business during coming months?

During the past seven years, residential construction expenditures in New England accounted for an estimated 45 per cent of total construction outlays. During 1954 the demand for housing has continued as a strong support of business. A subsequent article will analyze New England residential construction accomplishments. For the past 18 months, however, the major source of strength has been the expansion of heavy engineering construction. During 1953 a record $635 million was spent on heavy engineering construction in New England.[1] During the first eight months of 1954, expenditures in this category exceeded those for the same period of last year by 12.3 per cent.

For the past seven years, the boom in heavy engineering construction in New England has been more dependent upon the decisions of governmental agencies at the local, state and federal level than it has upon the construction decisions of private organizations or individuals. As shown in an accompanying chart, at no time since 1947 has the volume of private heavy engineering contracts exceeded 44 per cent of the regional total, the figure reached in 1953. In 1950 and 1951, less than a third of all heavy engineering construction was done on private account. In contrast, 54 per cent of the United States heavy engineering construction was on private account in those two years.

During World War II, when construction was limited for defense purposes to essential structures, state and local government outlays for heavy engineering construction were severely reduced in both the region and in the nation. Private construction outlays in New England, however, consistently exceeded the national proportion in every year between 1940 and 1946. Immediately after the war, private contracts for heavy engineering construction began to expand to catch up with pent-up demand for industrial buildings. State and local government construction on buildings and highways picked up slowly from a proportion of only 21 per cent at the end of the war to reach 61 per cent of the regional total in the year 1950. In the years since World War II, state and local government spending for this purpose in the region has ranged well above the national average, in some cases being nearly double the national pattern of expenditures in this category.

In spite of the relatively large role played by public expenditures for heavy engineering construction, the rate of construction in New England has been slower than the U. S. average. During 1953, the post-war high, total expenditures for heavy engineering construction in New England were $635 million. That represented an average annual expenditure of $65.50 per capita as compared with $95.70 for the United States. On this per capita basis, regional expenditures for heavy engi-



[1] No all-inclusive data on construction put in place are available. This article is based on information regarding heavy engineering construction which is found in *Engineering News-Record*. These data are based on reports of projects proposed and news of work proceeding to contract. The coverage is estimated to be about 60 per cent of total construction including mass housing but excluding other residential building. Projects smaller than the following are excluded: water works, excavation, irrigation, $34,000; other public works, $60,000; industrial building, $82,000, and other building, $300,000.

neering construction have been running between two-thirds and three-quarters of the national average since 1948. During the past seven years, $3.3 billions worth of heavy engineering construction contracts were awarded in New England. This was approximately 4.2 per cent of the national volume. State and local government projects accounted for over half of this total. Private projects represented 38 per cent and Federal Government projects the remaining 11 per cent as shown in an accompanying table.

The pent-up demand for schools, hospitals and other public buildings in New England is clearly revealed in the data showing types of building in the years 1947 to 1953, inclusive. Approximately a third of total expenditures for heavy engineering construction during that period was devoted to public buildings.

In the private construction field, the construction of commercial buildings more closely matched the national pattern than the construction of industrial buildings. In the past seven years the nation as a whole devoted 19 per cent of its construction efforts to the building of industrial plants; in the region the proportion was only 12 per cent. Approximately the same proportions of the construction efforts of the region and nation were devoted to streets and roads, bridges, sewerage plants and water works.

The geographical distribution of heavy engineering construction in New England during the past seven years reflects three separate forces at work: (1) the greater financial resources of the three southern New England states, and, therefore, their greater ability to construct public buildings and hospitals, (2) the greater geographic area of the three northern states and, consequently, the relatively greater burden of road construction, (3) the proportionately greater impact of Federal Government spending for defense installations in the state of Maine.

During the seven-year period, each of the southern New England states devoted more than 24 per cent of its heavy engineering construction efforts to public buildings. In the three northern states only Vermont devoted as much as 20 per cent of such outlays to public buildings. On the other hand, in the three southern states of New England only Massachusetts devoted as much as 12 per cent of its construction outlays to streets and roads, whereas the lowest percentage in northern New England was 18 per cent for Maine. New Hampshire devoted one quarter of its heavy construction outlays to the building of streets and roads. Expenditures for the large Air Force installations at Limestone and Presque Isle in Maine were reflected in the fact that 38 per cent of all heavy engineering outlays in Maine during the seven-year period since 1947 were attributable to Federal Government outlays.

THE STRUCTURE OF NEW ENGLAND'S HEAVY ENGINEERING CONSTRUCTION

	1947-1953 inclusive		1954 — 8 Months	
	United States	New England	United States	New England
Total construction contracts in millions of dollars	77,853	3,297	9,350	494
Percentages of total by type of ownership				
Public				
Federal Government	16.5	11.3	8.6	14.6
State and local	31.5	50.5	34.1	47.5
Private	52.0	38.2	57.3	37.7
Percentage of total by type of construction				
All buildings	**68.7**	**67.8**	**66.6**	**57.7**
Public	20.5	32.0	14.2	20.3
Private				
Commercial	29.4	23.6	38.8	23.1
Industrial	18.8	12.2	13.6	14.3
Other				
Streets and roads	10.7	11.1	12.8	15.5
Bridges	3.5	4.8	3.5	6.1
Sewerage	2.6	3.1	2.6	3.9
Water works	1.8	2.1	1.6	1.5
Earthworks	4.1	1.1	1.9	.5
Unclassified	8.6	10.0	11.0	14.8

Source: **Engineering News-Record.**

Industrial Construction

For the past three years heavy engineering construction awards for the industrial classification, which includes public utility buildings, have been running at very high levels in New England. In 1951, the volume of such contracts was more than two and one-half times the average of the 1947-49 period. In 1952, the total amounted to twice that of the base period and last year it averaged 182 per cent of the 1947-49 base.

Even this high level of activity, however, failed to maintain the region's proportion of such contracts in the national total. During the World War II period, New England's proportion of industrial building construction generally ranged between five and nine per cent of the national total. Only in 1943 did it drop as low as 3.9 per cent. In 1950, New England's proportion of the U. S. total dropped to 1.2 per cent, rose to three per cent in 1952, and dropped again to 2.3 per cent last year. This may be compared with the region's 8.5 per cent share of the nation's manufacturing payrolls. The drop in the region's share of heavy construction undoubtedly reflects the national emphasis on expansion of heavy industries such as steel and aluminum in which New England does not participate.

Construction Backlog

Heavy engineering construction usually requires long-term planning before the contract is awarded. To provide information about the potential volume of construction activity, *Engineering News-Record* has developed what it calls a backlog of construction work.

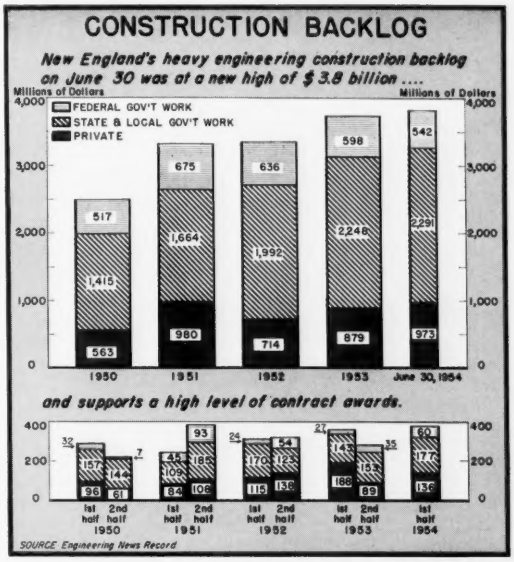
As proposals for construction work are reported to the central *Engineering News-Record* office by a field representative, they are entered into the backlog. As work is advanced to the contract stage or projects are abandoned, they are withdrawn from the backlog. Consequently, the backlog at any one time consists of an accumulation of projects that have been proposed and which have not been abandoned or advanced to the contractual stage. During the past few years, somewhat less than half of the projects entering the backlog during a given season have advanced to contractual stage during that season. The remaining projects are by no means entirely abandoned. Therefore, the backlog tends to accumulate from year to year.

By June 30, 1954, the New England heavy engineering construction backlog amounted to $3.8 billion. This was the equivalent of nearly six years of construction at the 1953 rate of contracting. The U. S. accumulation

was essentially similar in terms of the years of work in the backlog. Since 1949 both the U. S. and the regional backlogs have amounted to between five and six times the current annual volume of contracts.

The ratio of contracts in the backlog to the current construction volume varies among the several types of construction. For example, in New England the backlog of bridge construction was 11 times the 1953 annual volume of that type of construction. Street and road projects in the backlog in June were nearly 10 times the 1953 construction volume. Public works backlogs averaged over eight times the annual volume in 1953. Private projects were three-and-a-half times the previous year's work.

During 1953 and the first half of 1954, some 60 per cent of New England construction contracts have been drawn from the backlog. The remainder went directly from the planning to the contractual stage without being entered into the backlog. During 1953 it appears that 40 per cent more construction entered the backlog than left it via the channel of contracts awarded. The comparable proportion in the United States was a scant six per cent. This reflects partially the greater dependence in New England upon state and local construction which requires a longer term in planning. During the first half of 1954, however, the new proposed work going into the New England backlog was five per cent smaller than the volume of contracts awarded from the backlog. In the United States the 1954 backlog grew as the inflow of proposed projects was 20 per cent greater than the outflow to contracts awarded. An accompanying chart illustrates the growth of New England's construction backlog.



Current Trends

Heavy engineering construction in New England got off to a strong start in 1954. During the first eight months contracts totaled about $494 million. This was a gain of 12.3 per cent from last year's level for the same period and compares favorably with a 6 per cent decline in United States construction.

The current strength in New England's heavy engineering construction is clearly based on the decisions of state, municipal and Federal Government agencies. Contract awards in the private sector dropped by $36 million during the first eight months of this year. This 14 per cent drop was more than compensated for by an increase of $78 million in the public category. The $44 million increase in the year-to-year figures for state and municipal outlays caused a large portion of that strength, but Federal Government contracting in the region during the first eight months expanded by 93 per cent to reach a total of $72 million.

The weakness in the region's private construction during 1954 is primarily due to a decline in commercial building other than privately financed mass housing projects. The total volume in this class of commercial building category during the first eight months of this year is only $55 million, a decline of 48 per cent from the 1953 comparable total. The volume of this form of contracting in the United States expanded by four per cent during the first eight months of 1954. On the other hand, the volume of industrial building contracts in New England had reached $71 million by the end of August, an increase of 27 per cent over the level for the corresponding period of 1953. In the United States it has been reduced 29 per cent.

The volume of public construction in New England is spurting upward during 1954 under the stimulus of plans for toll roads, multiple lane highways and general street repair. During the first eight months of this year heavy engineering contracts for streets and roads totaled approximately $76 million, nearly double the volume recorded during the same period in 1953. In contrast, for the United States, contracts awarded for street and road construction have increased only three per cent this year. Public construction of buildings has declined in both New England and the United States during 1954. Public construction of bridges, water works and sewerage plants all increased markedly in New England during the first eight months, whereas in the United States each category declined. In total, these three categories in the region expanded nearly $26 million, almost doubling their 1953 volume for the same months.

The large volume of construction contracts awarded during recent months together with the record accumulation of contracts listed in the backlog provides solid evidence that heavy engineering construction activity during coming months should remain at high levels. That possibility is further strengthened by the fact that much of the current strength in heavy engineering construction awards is dependent on decisions made by municipal, state and federal governmental agencies. These decisions are unlikely to be adversely affected by short-term changes in business conditions.

The continuation of industrial and utility construction in New England at a level matching last year's performance is an encouraging sign. However, it is a sobering thought to recall that in no year since the end of World War II has New England accounted for as much as five per cent of the industrial and utility construction awards of the United States. During the past four years, that proportion has been generally less than three per cent and reflects adversely upon the industrial growth of the region.

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INCOME PAYMENTS TO INDIVIDUALS

in New England and the United States

INCOME PAYMENTS received by individuals provide one of the best measures of the economic health of a state or region. They measure the ability of the public to spend or invest from current income. Relative changes in income indicate broad economic trends. This article presents the most recently available data on income payments to individuals in various states.[1]

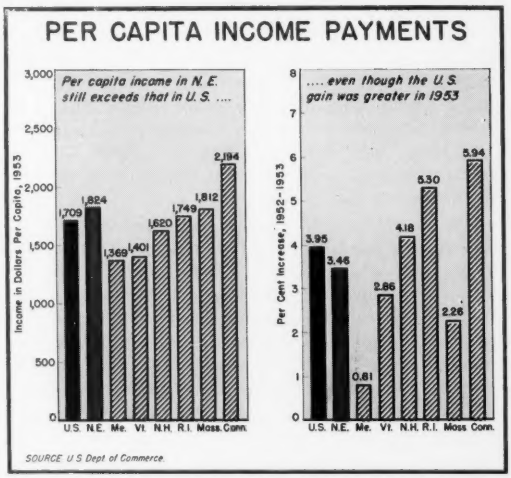
Income payments to individuals in New England totaled $17,686 million in 1953, six per cent more than in 1952. New England's percentage increase equaled that of the nation. Connecticut was the only state in the region which made an above-average gain. Income of individuals in that state exceeded the 1952 figure by eight per cent. Only six states in the country enjoyed a more rapid increase. Maine recorded the smallest advance of the New England states — three per cent. Individual incomes in Vermont expanded six per cent in 1953. In the other New England states they grew by five per cent.

New England's population increased somewhat more rapidly than that of the country as a whole in 1953. Because of this, per capita income payments in the region did not expand quite as fast as those in the United States, as shown in an accompanying chart. Nevertheless, the average income received by New Englanders continued to exceed the national average by seven per cent. Delaware was the only state that enjoyed a higher per capita income than Connecticut in 1953. The average income of Connecticut residents was 28 per cent above the national average. Only 13 states had higher per capita incomes than Massachusetts and Rhode Island. The three northern New England states continued to have lower than national average per capita incomes.

Income from all major sources except agriculture moved up last year in the United States and New England. Manufacturing industries were the largest source of income in every New England state. The region as a whole derived one-third of its income from factory payrolls in 1953, slightly more than during the preceding year. Only Michigan obtained a larger percentage of its total income from this source than did Connecticut. Rhode Island, New Hampshire, and Massachusetts also ranked among the first eleven states in the nation in proportion of income obtained from manufacturing activities.

Total manufacturing payrolls in New England expanded by eight per cent in 1953, somewhat less than the 11 per cent increase in the nation. The varying industrial structure of individual New England states and diverse developments in predominant industries largely explain differences in income growth among states.

Income from manufacturing industries advanced only two per cent in Maine and four per cent in New Hampshire and Rhode Island in 1953, mainly because of their heavy reliance on the lumber and textile industries.



Payrolls in those industries failed to increase in 1953. Massachusetts has a greater proportion of workers in the electrical machinery, transportation equipment, fabricated metals, and instruments industries. Those durable goods industries enjoyed substantial payroll expansion in 1953, contributing to eight per cent advances in total factory income in Massachusetts and Vermont. Connecticut relies more heavily on hard goods manufacturing than other New England states. Connecticut recorded a 12 per cent advance in manufacturing payrolls in 1953.

Agriculture is relatively unimportant in New England as a source of income, accounting for only 1.3 per cent of the region's total income payments to individuals. Total income in New England, therefore, was not seriously affected by the decline which occurred in farm income in 1953 in every state in the region except New Hampshire. Maine was the only New England state where the drop in farm income was larger than the national average. Agricultural income in that state declined 40 per cent because of drastic reductions in potato prices.

A 19 per cent gain in contract construction payrolls in Maine, reflecting large military construction projects, helped offset the drop in farm income. Vermont also enjoyed a sizable gain in construction payrolls last year. This source of income increased only one per cent for the region as a whole, however, as the other New England states had either small gains or losses.

Income from government sources increased five per cent in both New England and the United States in 1953. Variations from state to state were small.

Trade and service income also showed little divergence among individual states. It expanded five per cent in New England and six per cent in the nation. In every New England state except Connecticut and Massachusetts, income from trade and service industries increased slightly more rapidly than total income.

[1]Income estimates in this article were drawn from "State Income Payments in 1953," *Survey of Current Business*, August 1954, published by the United States Department of Commerce.